



# Nature Care College

## Anatomy & Physiology 2

### DESCRIPTION

This unit of study offers a deeper study of the physiological systems of the human body by exploring the clinical application and relevance of the material studied in Anatomy and Physiology 1A, 1B and 1C.

### DURATION

72 hours

### LEARNING OUTCOMES

By the conclusion of this unit, students should be able to:

1. Describe the structure and function of cells and tissues.
2. Describe advanced concepts related to the structure and function of each of the following:
  - a) musculoskeletal
  - b) nervous
  - c) endocrine
  - d) cardiovascular
  - e) respiratory
  - f) lymphatic
  - g) digestive
  - h) urinary
  - i) reproductive
3. Explain basic concepts of genetics and inheritance.
4. Describe basic concepts of embryological development.
5. Describe in detail the process of lactation.

### TEACHING METHOD

Modified lectures.  
 Group and class discussions.  
 Demonstrations and practical activities.

### ASSESSMENT

Assignment	50%
Formative Exam	50%

**Pass mark 60%**

**Both components must be passed at 60% in order to pass this subject satisfactorily.**

**Note:** To facilitate the return of your assignment you will need to provide a stamped addressed envelope. If no envelope is provided assignments will be destroyed after results are recorded. Please also make a copy of your assignment before submission for your own records.

### COMPETENCIES PARTIAL COMPLETION

Successful completion of this Unit of Study is in partial completion of the following Health Training Package HLT07 Units of Competency:

HLTAP501A Confirm physical health status

<b>ATTENDANCE</b>	80% minimum.
<b>PRE-REQUISITES</b>	Anatomy & Physiology 1A, 1B, 1C
<b>CO-REQUISITES</b>	Nil.
<b>MATERIALS REQUIRED</b>	Notepad, Pen.
<b>TEXTBOOKS</b>	<p><b>Compulsory:</b></p> <p>Tortora G. Derrickson B (2012) <i>Principles of Anatomy and Physiology</i> 13<sup>th</sup> Edition, John Wiley &amp; Sons Inc Unbound document</p> <p><b>Recommended Reading / References:</b></p> <p>Nursing and Allied Health, most current edition. <i>Mosby's Dictionary of Medics</i>, Mosby, US Any photographic atlas of human anatomy e.g.: Netter F &amp; Hansen J. 2003. <i>Atlas of Human Anatomy</i>. 3rd Ed. Novartis Medical Education. USA. Rohen J. 2002. <i>Colour Atlas of Anatomy: A Photographic Study of the Human Body</i>. Lippincott, Williams &amp; Wilkins Publishers, USA.</p>

## WEEK-BY-WEEK OUTLINE

The following is a guide only. The facilitator may alter the program at his/her discretion to best meet the needs of the particular group and to accommodate either 'intensive' or 'week-by-week' delivery.

### TERM 1

<b>WEEK 1</b>	Review of the cell / protein synthesis / ATP production.
<b>WEEK 2</b>	The cell and movement of substances across the cell membrane
<b>WEEK 3</b>	Epithelial tissue / connective tissue
<b>WEEK 4</b>	Skeletal muscle tissue
<b>WEEK 5</b>	Nerve tissue
<b>WEEK 6</b>	Central nervous system (the brain / blood supply of the brain / cerebrum)
<b>WEEK 7</b>	Central nervous system (diencephalon / cerebellum / brainstem)
<b>WEEK 8</b>	Cranial nerves.
<b>WEEK 9</b>	Spinal cord/ascending tracts/ involuntary motor control.
<b>WEEK 10</b>	<p><b>Assignment Due</b></p> <p>Descending tracts of the spinal cord involved in voluntary motor activity The plexi / spinal nerve innervation of the skeletal muscles</p>
<b>WEEK 11</b>	Autonomic nervous system
<b>WEEK 12</b>	<b>Examination</b>

## TERM 2

WEEK 1	Endocrine system (1)
WEEK 2	Endocrine system (2)
WEEK 3	Endocrine system (3)
WEEK 4	Endocrine system (4)
WEEK 5	Cardiovascular system (blood)
WEEK 6	Cardiovascular system (heart)
WEEK 7	Class presentations / Cardiovascular system (blood vessels)
WEEK 8	Class presentations / Cardiovascular system (major blood vessels of the body)
WEEK 9	Class presentations / Respiratory system (gas transport)
WEEK 10	Class presentations / Respiratory system (voice production)
WEEK 11	Class presentations
WEEK 12	<b>Examination</b>

## TERM 3

WEEK 1	The lymphatic system (1)
WEEK 2	The lymphatic system (2)
WEEK 3	The lymphatic system (3)
WEEK 4	The lymphatic system (4)
WEEK 5	The digestive system (1)
WEEK 6	The digestive system (2)
WEEK 7	The urinary system
WEEK 8	The reproductive system (1)
WEEK 9	The reproductive system (2)
WEEK 10	The reproductive system (3)
	<b>Assignment Due</b>
WEEK 11	Reproductive system (4)
WEEK 12	<b>Examination</b>

Please be respectful of your fellow students and arrive on time for classes. Please ensure all mobile phones are turned off prior to the commencement of class.